SB 1918 (California) declaration:

YOUR INSURANCE POLICIES MAY NOT PROVIDE COVERAGE FOR ACCIDENTS INVOLVING THE USE OF THIS SCOOTER. TO DETERMINE IF COVERAGE IS PROVIDED, YOU SHOULD CONTACT YOUR INSURANCE COMPANY OR AGENT.

QUESTIONS?

Please read the owner's manual thoroughly. If you still have questions, check our website for updates and contact information.

Spare tires, tubes and batteries are available! Keep your Razor scooter running for years with these and other genuine Razor parts.

Visit our website and e-mail us for more information on spare part availability.

Specifications subject to change without notice.

Patent Pending

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Photos by Arthur Cambridge

IMPORTANT!

If your Razor has a problem call Razor USA Toll Free (866) 467-2967

DO NOT RETURN TO STORE

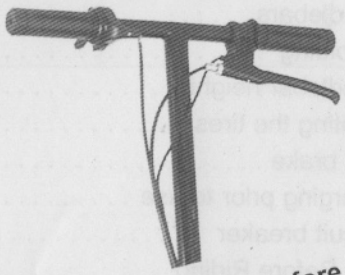
⚠ **WARNING: WEIGHT LIMITS**

- **E100:** 120 pounds maximum rider weight limit. Heavier riders may cause damage not covered by warranty.
- **E200 and 300:** 220 pounds maximum rider weight limit. Heavier riders

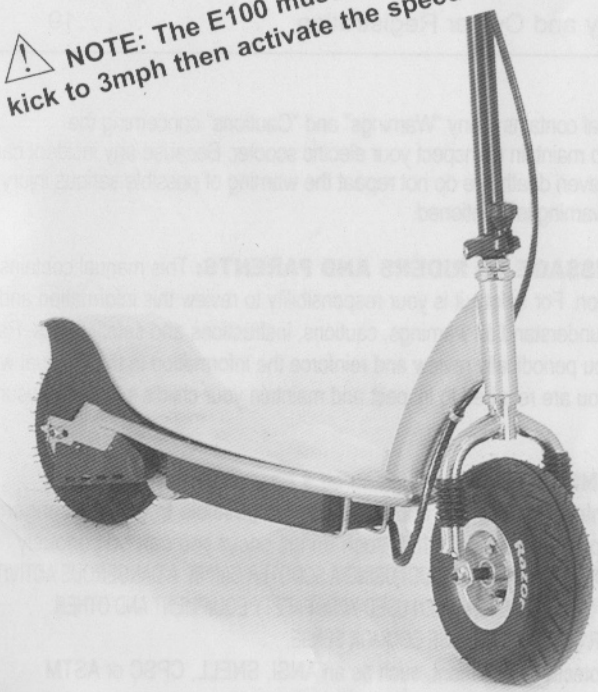
Razor™

razor usa llc po box 3610 cerritos, ca 90703 www.razor.com

Razor™



⚠ **NOTE: The E100 must be going 3 mph before motor will start. kick to 3mph then activate the speed control to engage the motor.**



Applies to E100, E200 and E300 type electric scooters

Owner's Manual

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⚠ **NOTE:** This manual contains many "Warnings" and "Cautions" concerning the consequences of failing to maintain or inspect your electric scooter. Because any incident can result in serious injury or even death, we do not repeat the warning of possible serious injury or death each time such a warning is mentioned.

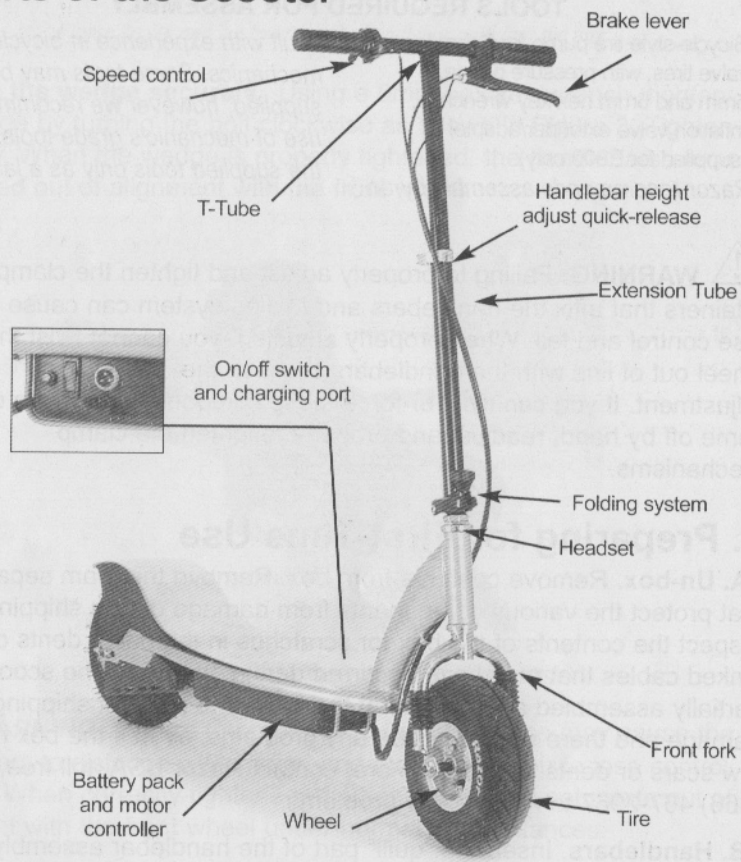
AN IMPORTANT MESSAGE TO RIDERS AND PARENTS: This manual contains important safety information. For safety, it is your responsibility to review this information and make sure that all riders understand all warnings, cautions, instructions and safety topics. Razor USA recommends that you periodically review and reinforce the information in this manual with younger riders and that you are required to inspect and maintain your child's scooter to insure their safety.

⚠ **GENERAL WARNING:** Scooter riding can be a hazardous activity. Electric scooters can, and are intended to, move and it is therefore possible to get into dangerous situations and/or lose control and/or fall off. If such things occur you can be seriously injured or die. LIKE ANY OTHER MOVING PRODUCT,USING A SCOOTER CAN BE A DANGEROUS ACTIVITY AND MAY RESULT IN INJURY OR DEATH EVEN WHEN USED WITH SAFETY EQUIPMENT AND OTHER PRECAUTIONS. USE AT YOUR OWN RISK AND USE COMMON SENSE.

- Always wear proper protective equipment, such as an ANSI, SNELL, CPSC or ASTM approved helmet and elbow and kneepads. Long sleeve shirt, gloves, long pants,shoes, and elbow and knee pads are recommended. Wear athletic shoes (lace-up shoes with rubber soles). Don't ride barefoot or in sandals. Keep shoelaces out of the way of wheels.
- Use the scooter only on flat, dry, level ground without loose debris, such as rocks or gravel.
- Never use the scooter at dusk or night or in wet or icy conditions.
- Avoid water, speed bumps, sand, gravel and anything else that could cause your front wheel to stop. When in doubt, avoid the bumps.
- Do not exceed weight limits for your scooter (see page 16).
- Do not allow children under age eight (8) to use the E100 scooter or children under age 16 to use the E200 and E300 scooters. All children and preteens should ride with adult guidance at all times.
- Watch your surroundings for pedestrians, bikes, and skateboard and scooter riders. Use the scooter in areas free from fixed or moving hazards, such as poles, curbs, hydrants, walls, parked automobiles and traffic.

FAILURE TO USE COMMON SENSE AND HEED THE ABOVE WARNINGS FURTHER INCREASES RISK OF SERIOUS INJURY. USE AT YOUR OWN RISK AND WITH APPROPRIATE AND SERIOUS ATTENTION TO SAFE OPERATION. USE CAUTION.

1. Parts of the Scooter



⚠ **NOTE: Do not activate the speed control on the t-tube unless you are on the scooter and in a safe, outdoor environment suitable for riding. The E100 must be going 3 mph before motor will start.**

⚠ WARNING: REGARDING USE OF NON-RAZOR PRODUCTS WITH YOUR RAZOR SCOOTER. Your electric scooter has been built to Razor's design specifications. All the original equipment supplied at the time of sale were selected on the basis of their compatibility with the frame, fork and all other parts. Certain after-market products may or may not be compatible with your Razor electric scooter. Consult your retailer or call Razor prior to modifying or replacing any component with a non-factory specified product.

⚠ WARNING: CHECK LOCAL LAWS REGARDING SCOOTER USE. Check local laws and regulations to see where and how you may use your Razor electric scooter legally. In many states and local areas scooter riders are required BY LAW to wear a helmet. Check local laws and regulations regarding laws governing helmet use, age and e scooter operation in your area.

TOOLS REQUIRED FOR ASSEMBLY

- Bicycle-style tire pump for Schrader valve tires, with pressure gauge.
- 5mm and 6mm hex key wrenches.
- Inflation valve extender/adapter (supplied for E300 only).
- *Razor recommends assembly by an adult with experience in bicycle mechanics. Some tools may be supplied, however we recommend the use of mechanic's grade tools. Use the supplied tools only as a last resort.*

⚠ **WARNING:** Failing to properly adjust and tighten the clamps and retainers that affix the handlebars and folding system can cause you to lose control and fall. When properly adjusted, you cannot twist the front wheel out of line with the handlebars or move the T-tube out of adjustment. If you can twist or force these components to move or come off by hand, readjust and properly retighten the clamp mechanisms.

2. Preparing for First-Time Use

2A. Un-box. Remove contents from box. Remove the foam separators that protect the various components from damage during shipping. Inspect the contents of the box for scratches in the paint, dents or kinked cables that may have occurred during shipping. The scooter was partially assembled and packed at the factory to prevent shipping damage and there should not be any problems, even if the box has a few scars or dents. But if there are, contact Razor USA, toll free, at (866) 467-2967 to resolve any problems.

2B. Handlebars. Insert the "quill" part of the handlebar assembly into the fork as shown in Figures 2a, 2b and 2c. You may have to loosen the wedge (as pointed out in 2b) to allow it to slip into the fork. Slide the quill into the fork until it bottoms on the headset as shown in 2c.

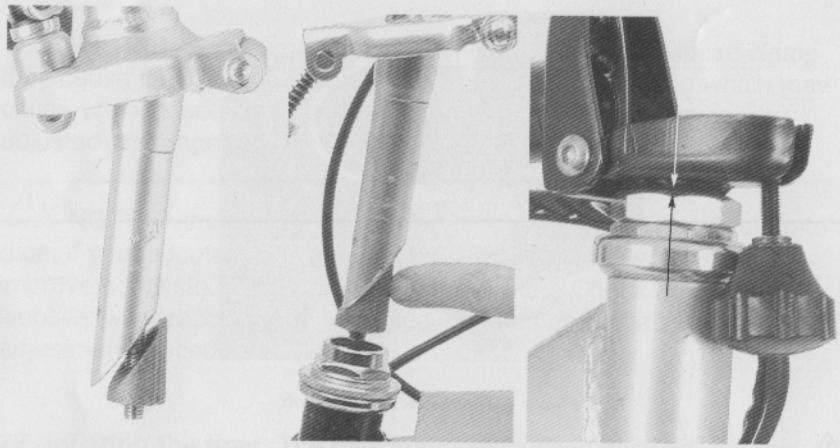


Figure 2a, 2b and 2c. Inserting the handlebar quill into the fork.

Tighten the wedge securely. Using a 6mm hex key wrench, tighten the wedge by turning the bolt clockwise as shown in Figure 3. Tighten securely. When the wedge is properly tightened, the handlebars cannot be twisted out of alignment with the front wheel.

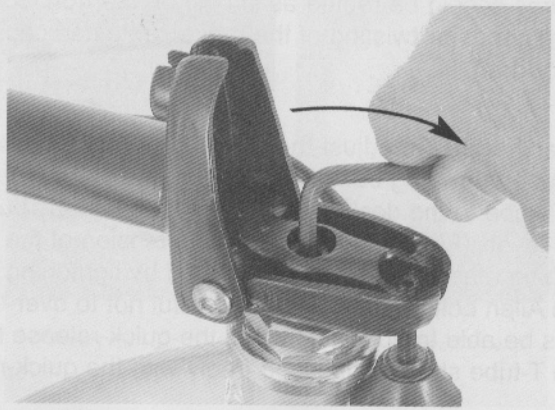


Figure 3. Tighten the wedge using a 6mm allen wrench.

⚠ **WARNING:** Failure to properly tighten the wedge may cause the handlebars to dislodge while riding and may cause you to lose control and fall. When correctly tightened, the handlebars will not rotate out of alignment with the front wheel under normal circumstances.

2C. Unfolding the handlebar. Pivot the handlebar assembly upright. Swing the locking knob to the 12 o'clock position and tighten as shown in Figure 4. Tighten by hand as tight as possible.

Figure 4. Tighten the locking knob.

⚠ **WARNING:** Keep your fingers clear of the pivoting mechanism when folding or unfolding the scooter. Make sure others are standing clear.

⚠ **NOTE:** The cable and wire assembly from the handlebar must not be wrapped around the steering tube or over the handlebar. The cables and wires should be routed as shown on the front cover of the manual. Sharp bends or twisting of the brake cable can cause the brake to be mushy or drag.

2D. Handlebar height. To adjust the height of the handlebars, unlock the steering tube by pulling outward on the quick-release lever (Figure 5). Slide the T-tube to the desired position and secure by pushing the quick release lever (Figures 5a and 5b). The tension of the quick-release clamping mechanism can be adjusted by tightening or loosening the Allen bolt (Figure 5c) . Be careful not to over-tighten. You should always be able to open and close the quick-release lever by hand and the T-tube should telescope freely with the quick-release open.

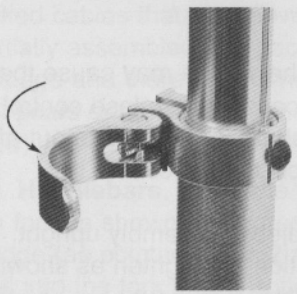


Figure 5a.

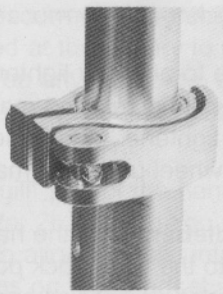


Figure 5b.

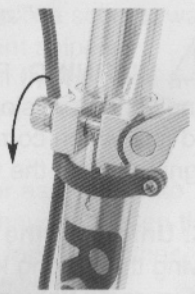


Figure 5c.

⚠ **WARNING:** Failure to properly engage the quick-release clamp may cause the T-tube to telescope up or down while riding which may cause you to lose control and fall. With the quick-release properly adjusted and engaged, the handlebars will not move up or down.

⚠ **NOTE:** Although we make every effort to keep our manual up-to-date, if your scooter does not look exactly this, then we've made improvements since this document was printed. Check out the Razor website: www.razor.com for technical updates on the latest service and adjustment procedures.

2E. Inflating the tires. The tires are inflated when shipped, but they invariably will lose some pressure between the point of manufacturing and your purchase.

Using a bicycle style tire pump equipped for a Schrader-type valve (Figure 6a), inflate the tires to the psi indicated on the sidewall of the tire.

Figure 6a.

Figure 6b.

⚠ **NOTE regarding the E300 rear wheel:** Inflating the rear tire of the E300 requires the use of a special valve extender/adapter, supplied with the scooter at time of purchase (Figure 7). To inflate the rear tire align the access hole in the drive sprocket with the tire valve. Thread the adapter completely onto the valve. Attached pump and inflate to 35 psi.

The valve adapter must be removed immediately after inflating. Failure to remove the adapter will cause the inner tube and or adapter to be severed by the rear drive sprocket. Place the adapter in a safe place for later use.

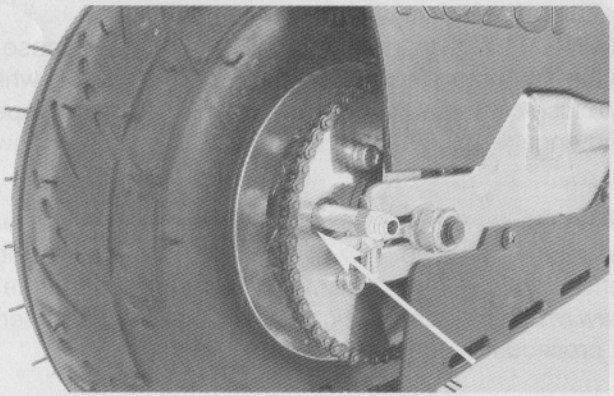


Figure 7.

⚠ **Note regarding using an air hose at a gas station.** The pressurized air supplies found at gasoline stations are designed to inflate high volume automobile tires. These systems are capable of instantaneously over-inflating the tires. If you decide to use such a supply to inflate your ties, make sure the pressure gauge is working prior to inflating the tires. Use very short bursts to inflate to the correct psi. If you inadvertently over-inflate the tire, release the excess pressure immediately.

2F. The brake. Your scooter is fitted with a hand-operated brake (Figure 8). To use the brake, squeeze the lever to increase the pressure on the brake until so you come to a smooth and controlled stop. The brake lever is fitted with a cable adjuster to compensate for cable stretch and/or to fine tune the lever movement to brake engagement. To adjust the play, thread the adjuster in or out (arrows, Figure 8) 1/4 to 1/2 turn until the desired brake adjustment is attained.

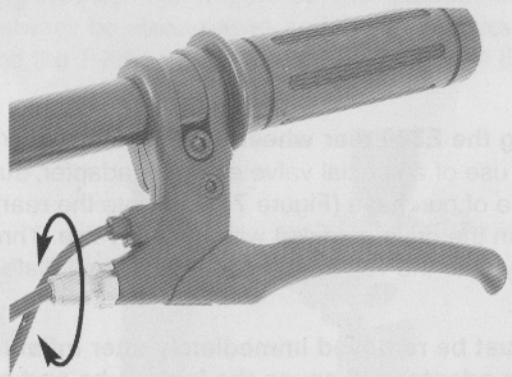


Figure 8.

⚠ **WARNING:** The brake is capable of skidding the tire and throwing an unsuspecting rider. Practice in an open area free from obstacles until you are familiar with the brake function. **Avoid skidding to a stop as this can cause you to lose control as well as cause damage the rear tire.**

2G. Charging the battery prior to use. Your scooter may not have a fully charged battery at the time of purchase. Therefore it is a good idea to charge the battery prior to use. The charging input, on/off switch and overload breaker are located under the deck at the front left hand side as shown in Figure 9.

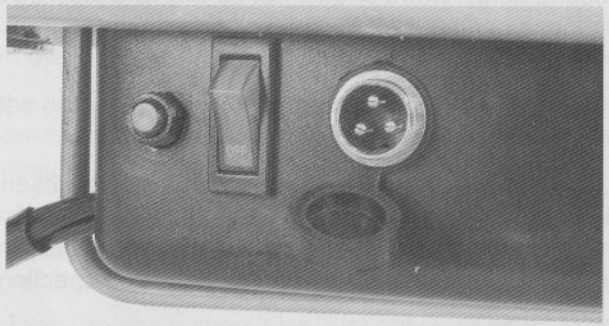


Figure 9.

The charger has a small window with one LED or two LEDs to indicate the charge status (Figure 10). Refer to the illustration on the charger unit for the actual "charging" and "charged" status indications for your model charger. The initial charge may take from a few minutes to up to 4 hours depending on the level of depletion.

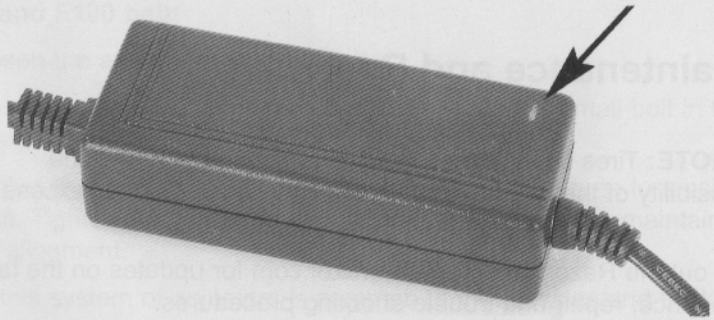


Figure 10.

2H. Circuit breaker. The circuit breaker (next to on/off switch in Figure 9) will automatically shut off the power to the motor in the event an

overload condition is placed on the motor. An excessive overload, such as too heavy a rider or too steep a hill, could cause the motor to overheat. If your scooter suddenly stops running, wait a few seconds and then push the breaker to reset the circuit. Avoid whatever conditions caused the breaker to trip and avoid repeatedly tripping the breaker.

3. Safety Check Before Riding

3A. Loose parts. While straddling the Razor Scooter, lift the front up two or three inches and let go so it can bounce on the ground. Does everything sound tight? There should not be any unusual rattles or sounds from loose parts or broken components. If you are not sure, ask an experienced mechanic to check.

3B. Brake. Check the brake for proper function. When you squeeze the lever, the brake should provide positive braking action.

3C. Frame, fork and handlebars. Check for cracks or broken connections. Although broken frames are rare, it is possible for an aggressive rider to bash into a curb or wall and wreck and bend or break a frame, fork or handlebar. Get in the habit of inspecting yours regularly.

3D. Tire inflation. ***Periodically and regularly check the tire pressure and reinflate as necessary.*** If you get a flat tire, the inner tube can be patched or a new tube can be purchased from Razor.

⚠ **CAUTION:** This product moves when used. Exercise caution and common sense when riding.

4. Maintenance and Repairs

⚠ **NOTE:** Tires are subject to normal wear and tear. It is the responsibility of the user to periodically inspect the tires for excess wear.

Check out the Razor website: www.razor.com for updates on the latest maintenance, repair and trouble-shooting procedures.

ADJUSTING THE CHAIN OR BELT TENSION

⚠ **NOTE: Turn power switch off before maintenance procedures.**

E300 chain: If the rear wheel makes loud noises or grinding sounds during the power-on condition, this indicates the chain is probably making the noise. This can be caused by the chain being adjusted too tight during assembly *or* if the chain becomes dry from lack of lube or loose from normal wear-and-tear.

If the chain is too tight, or too loose (keeps coming off), then it needs to be readjusted. If the chain is dry, apply a lube such as WD-40 to the chain.

To adjust the chain:

1. Loosen the axle (please refer to the illustrations for the E200/E100 belt drive on the next page as the procedure is essentially the same).

2. Loosen the brake anchor (this is attached with the small bolt in the long slot on the left side of the rear fork)

3. Tighten the tension adjusters on the axle 1/8 to 1/4 turn to tension the chain. Tighten both adjusters the exact same amount to maintain the wheel alignment.

Note: this system of adjusters is common to motorcycles and BMX bicycles so I your are not familiar with it, if you know anyone who is, they would not have a problem adjusting it for you.

Chain tension: The chain should be "just not-quite snug" in other words, not taut or sloppy loose. BE CAREFUL NOT TO ADJUST TOO TIGHT. The tensioning system can easily impart too much tension and snap the chain or bend the motor output shaft. Turn the adjusters 1/8 to 1/4 turn at a time and recheck the tension each time.

4. Once the tension is good, tighten the axle and brake anchor bolt. Test run the scooter. Readjust as needed.

E200 and E100 belt:

1. Loosen the axle.

2. Loosen the brake anchor (this is attached with the small bolt in the long slot on the left side of the rear fork)

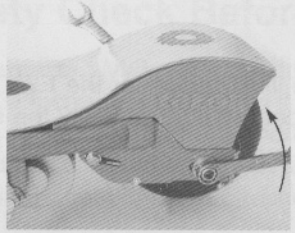
3. Tighten the tension adjusters on the axle 1/8 to 1/4 tune to tension the belt. Tighten both adjusters the exact same amount to maintain the wheel alignment.

Note: this system of adjusters is common to motorcycles and BMX bicycles so I your are not familiar with it, if you know anyone who is, they would not have a problem adjusting it for you.

The belt should be "just taut" in other words snug, but not piano-wire (or guitar string, etc.) tight. It should be tensioned similar to the fan belt on

an automobile. BE CAREFUL NOT TO ADJUST TOO TIGHT. The tensioning system can easily impart too much tension and snap the belt or bend the motor shaft. Adjust 1/8 to -1/4 turn at a time and check the tension each time.

4. Once the tension is good, tighten the axle and brake anchor bolt. Test run the scooter. Readjust as needed.



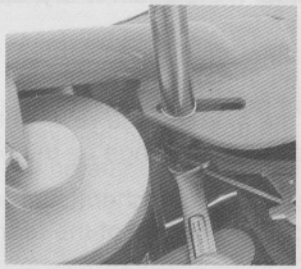


Fig 11. Loosen rear axle. *Fig 12. Loosen the brake anchor screw.*

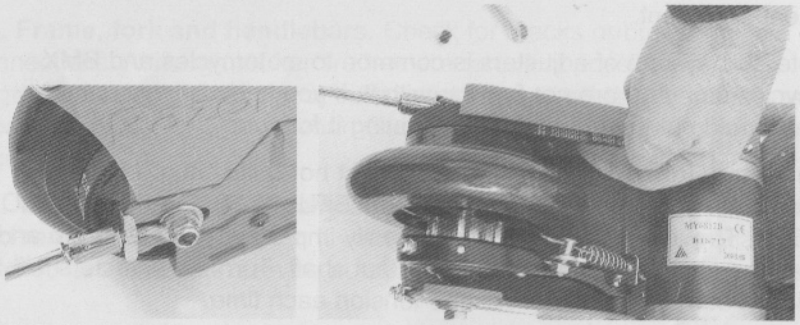


Fig 13 and 14. Tighten both axle adjusters equally, 1/8 to 1/4 turn until the belt or chain is properly tensioned.

WHEEL REMOVAL/REPLACEMENT PROCEDURE

Occasionally the rear wheel may need to be removed to replace a worn tire or fix a punctured inner tube. Tools required: 10mm open end and socket wrenches, blade screwdriver, two (2) 13mm box wrenches or two 17mm box wrenches.

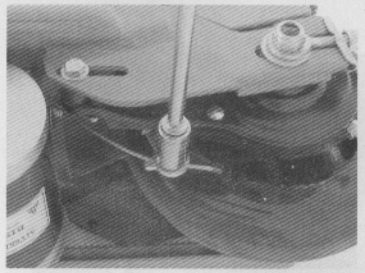


Fig. 15. Loosen brake cable anchor and disconnect the cable.

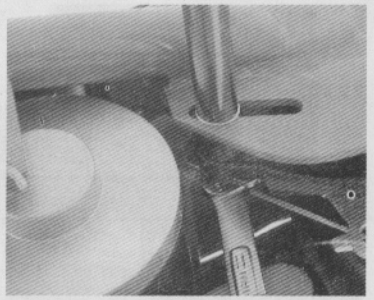


Fig. 16. Loosen brake housing anchor and disconnect.

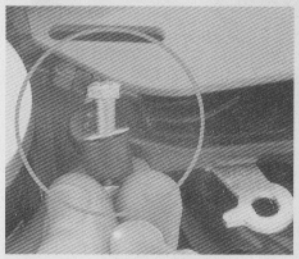


Fig 17. Keep the spacer and washers together!

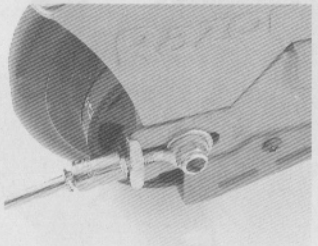
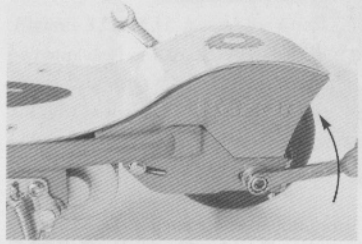


Fig 18. Loosen both axle adjusters an equal amount, about five turns.



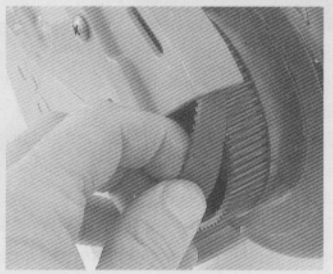
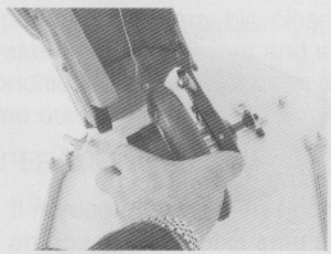


Fig 19 & 20. Loosen the axle and push the wheel forward in the slots to loosen the belt as shown.



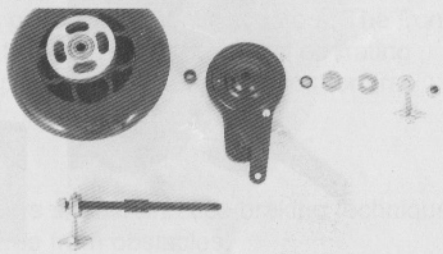
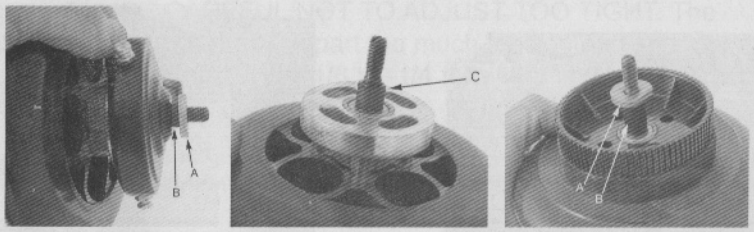
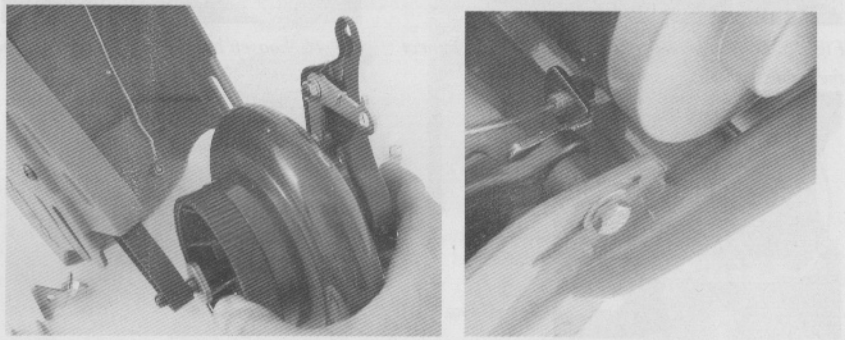


Fig 21 & 22. Pull the old wheel out. Note the arrangement of the hardware sequence. The spacer order is small, medium, large, with the small spacer between the brake and frame, the medium between the brake and wheel,and the long between the wheel and frame (refer to following sequence).



Figures 23, 24 and 25.



Figures 26 and 27. Install new wheel by maneuvering the belt onto the wheel pulley and slipping the axle into the slots on the frame. To hook up the brake housing anchor, align the cable guide adjuster and install the spacer and bolt. To not tighten until final step.

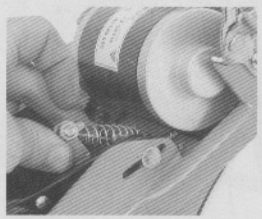
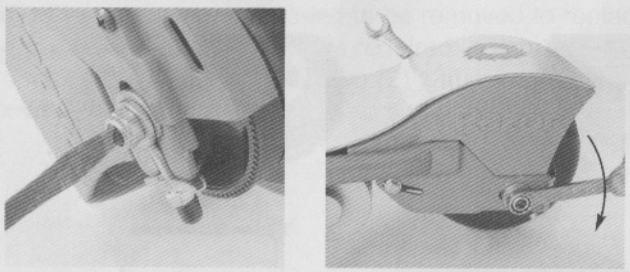


Figure 28. Install the brake spring and thread the cable wire into the cable anchor. Thread the cable to its original position and tighten securely.



Figures 29 and 30. Install the axle adjusters and axle nuts. Tighten until they just barely hold the hardware in place.

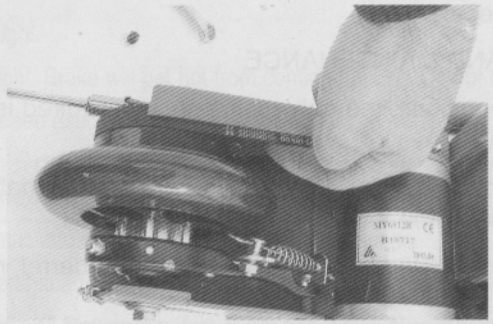
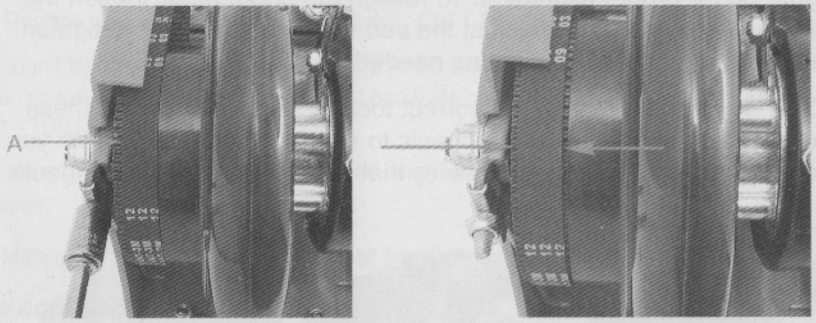


Figure 31. Tighten both axle adjusters the same number of turns to tension the drive belt and to approximately maintain the centering of the wheel.



Figures 32 and 33. Rotate the wheel several times (clockwise when looking at the pulley side). The belt may drift or "track" to one side of the pulley or the other. In this example it is tracking to the inside. You want the belt to track in the center as shown on the right. Loosen the adjuster 1/16 to 1/8 turn to track the belt to the center. Watch the belt tension and centering of the wheel! When the belt is tracking in the center and with the tension confirmed, tighten the axle nuts securely and tighten the brake housing anchor securely. Test ride and recheck. readjust as needed.

E100 Caliper Brake System

The E100 is equipped with a hand operated caliper brake similar to the type found on many bicycles and gasoline-powered scooters. The front brake provides efficient and safe braking under all normal operating conditions, however caution and practice are recommended for first-time riders.

OPERATION

1. It is recommended that new users should practice braking technique in an open area that is safe and free from obstacles.

2. To apply the brake, carefully squeeze the brake lever.

3. The user may wish to apply more or less force on the brake, depending on the rider's weight and vehicle speed to achieve the

desired rate of deceleration.

ADJUSTMENT AND MAINTENANCE

Under normal conditions, the only maintenance required is to maintain the correct cable slack.

4. The cable slack should be adjusted to allow approximately a 1/4-inch gap (4mm - 5mm) at the lever as shown in Figure 34.

5. Cable slack is adjusted by turning the adjusting barrel in or out, as shown in Figure 35.

6. Periodically, or if the brake performance diminishes, inspect the brake pads for proper alignment against the rim or excess wear. Refer to Figure 36 for proper alignment. To realign the brake pads, loosen the fixing nut (Figure 35) and adjust the pad to contact the rim. Retighten and test the function, readjust as needed.

NOTE: If you do not have the correct tools or understanding of these procedures, ask a qualified mechanic to make the adjustments for you. Most bicycle shops have mechanics that can make these adjustments.

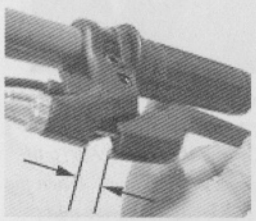


Figure 34.

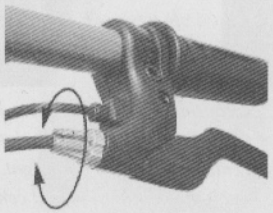


Figure 35.

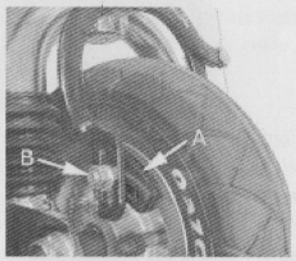


Figure 36.

5. Safety

A. Always wear proper protective equipment, such as an ANSI, SNELL, CPSC or ASTM approved helmet and elbow and kneepads. Long sleeve shirt, gloves, long pants, shoes, and elbow and knee pads are recommended. Always wear a helmet when riding your scooter and keep the chin strap securely buckled. Always wear shoes. Don't ride barefoot or in sandals. Keep shoelaces out of the way of wheels.

B. Ride on smooth, paved surfaces away from motor vehicles.

C. Avoid sharp bumps, drainage grates and sudden surface changes. Scooter may suddenly stop.

D. Avoid streets and surfaces with water, sand gravel, dirt, leaves, and other debris. Wet weather impares traction, braking and visibility. Avoid anything that could cause your front wheel to stop. Bumps have the potential to stop the front wheel. When in doubt, avoid the bumps.

E. Do not ride at night.

F. Do not ride at night. Brake will get hot from continuous use. Do not touch after braking.

G. Avoid excess speed associated with downhill rides.

H. Adults must assist children in the initial adjustment procedures to unfold scooter, adjust handlebar and steering to height, and finally to fold scooter.

I. Obey all local traffic and scooter riding laws and regulations.

J. Watch out for pedestrians

K. Check and secure all fasteners before every ride. Make sure the steering tube clamps, steering tube extension quick release, and handlebars spring buttons are locked properly in place before riding.

L. Replace worn or broken parts immediately. Call 1-866-GO-RAZOR for parts.

M. Don't try something until you are ready. Avoid steep inclines and don't ride too fast — you can lose control and fall. Skateboard parks are not designed for scooters. DO NOT DO STUNTS on the electric scooters.

O. Keep your fingers and toes clear of the hinge when folding and unfolding your Razor scooter.

P. Maintain a hold on the handlebars at all times.

Do not ride more than one person at a time. Never use near steps or swimming pools.

⚠ **WARNING:** Keep your fingers and other body parts away from the drive belt, steering system, wheels and all other moving components.

⚠ **WARNING TO PARENTS:** Kids need to be taught and be frequently reinforced of the importance of safe riding, the rules of the road and the dangers and hazards of traffic, especially motor vehicle traffic. Parents and children are urged to read and understand these safety tips together.

Rules of the road

Do not play in the road or street.
Ride only in areas permitted by local laws
Do not ride at night.
Stop for all stop signs
Use crosswalks to cross streets
Always walk at crosswalks.
Never use near steps or swimming pools

Your driveway. Driveway accidents are frequent and often fatal.

Realize the danger of your own and all other driveways. There may be obscured vision caused by trees, bushes or cars. Your driveway is not a launching pad for fast roll-outs! Observe the following driveway safety tips:

Look left, right and left again before exiting onto sidewalks or into playground areas.

Stop signs. Running a stop sign is a sure way to get hit by a car and killed. Remember, always stop at every stop sign or stop light. Always stop and walk across only when it is clear. Do not assume that drivers of motor vehicles can see you. In fact, assume that every driver cannot see you and that they are not paying attention. Observe the following safety tips:

Stop at all stop signs and lights, regardless of traffic conditions.
Look in every direction of traffic before proceeding to walk across.
Watch especially for oncoming traffic making left turns.
Watch for cars behind you or next to you making right turns.
Wait for traffic to clear before proceeding.

Turning without warning. Children are often struck by cars because they made unexpected turns into traffic, or they inadvertently veered into traffic when looking over their shoulder. Observe the following safety tips for left turns:

Do not cut across the street, cross only at intersections.
Practice looking over your shoulder to the rear without accidentally turning (do this only in an open space free from traffic and obstructions).

Riding at night and in low visibility. Do not ride at night or in low visibility.

Rules of the Road.

Wear a helmet. Wear shoes.

Become aware of and learn your local laws and regulations. Most states and communities have rules regarding helmet use, bicycle licensing, riding on sidewalks, grinding and so on. It is the responsibility of parents to make sure their children know and obey all rules and regulations.

Ride defensively. Assume that pedestrians and others are so absorbed in their own world that they are not paying any attention to you and that they will run you down or step out in front of you, all without any warning.

Watch for obstacles such as pot holes, sewer grates, expansion cracks, and road or construction debris (such as nails or other foreign objects) that could catch your wheel or force you to swerve into traffic or lose control.

Stop at all stop signs and lights.
Never ride with headphones or use a cell phone when riding.
Never carry a passenger.
Never hitch a ride with another vehicle.
Do not weave into traffic or make sudden turns.
Observe and yield the right-of-way as prescribed by local traffic rules.

Riding a scooter may be a hazardous activity and has inherent dangers that no amount of care, caution, instruction or expertise can eliminate. Certain conditions may cause the equipment to fail without fault of the manufacturer. Activities involving the use of scooters carry the risk of injury or death.

6. Razor Limited Warranty and Registration

The manufacturer warranties this product to be free of manufacturing defects for a period of 90 days from date of purchase. This Limited Warranty does not cover normal wear and tear, tires, tubes or cables, nor any damage, failure or loss caused by improper assembly, maintenance, storage or use of the Razor scooter.

This Limited Warranty will be void if the product is ever:

- used in a manner other than for recreation or transportation;
- modified in any way;
- rented.

Check local laws and regulations to see where you can ride your scooter legally.

The manufacturer is not liable for incidental or consequential loss nor damage due directly or indirectly from the use of this product.

To obtain service under this warranty you must, within the warranty period, contact Razor USA LLC directly by e-mail at warranty@razorusa.com. Razor will provide warranty replacement at its sole discretion.

Authorized warranty service is ONLY available from Razor USA LLC.